

Out for Blood

Growing numbers of bed bugs, mosquitoes and ticks are spreading misery and frustrating lawmakers.

BY MARY WINTER

Like vampires, bed bugs feed on human blood, do their best work at night and are very hard to kill. Also like vampires—at least those on TV and movie screens—bed bugs have made a mysterious comeback in the past decade.

The United States “is now experiencing an alarming resurgence in the population of bed bugs,” the Centers for Disease Control and Prevention and the Environmental Protection Agency announced in May. Unfortunately, they’re not the only bugs that have Americans scratching their heads and asking why now? Black-legged ticks are blamed for a surge of Lyme disease, and mosquitoes carrying the West Nile virus plague certain regions, even though their numbers nationally remain stable.

Experts can’t say with certainty what’s causing the increase, but blood-sucking vermin definitely are on state lawmakers’ minds. In the last four years, NCSL data show states have seen more than 100 bills on bed bugs and 92 mosquito-related bills. Nine states have enacted roughly 18 laws pertaining to Lyme disease, according to the Lyme Disease Association.

Night Feeders

Powerful—yet dangerous—pesticides such as DDT all but put an end to bed bugs in the 1950s, but since the late 1990s, they’ve been multiplying and are found in every state, sending complaints pouring into public health agencies, according to the CDC and EPA. About as big around as an apple seed, but as thin as a credit card, bed bugs hide in mattress seams, bed frames, headboards, cracks in furniture and behind wallpaper. They come out at night to feed on human and animal blood, typically leaving red, itchy welts where they bite. Bed bugs aren’t known to carry diseases, but they can cause infections and are costly to governments and businesses. Worst of all is the human suffering they cause, says Representative Dale Mallory (D) of Ohio.

“The stories are endless. People burn their houses down to get rid of bed bugs. People sleep in bathtubs. Kids are sent home from school with their coats in plastic bags,” he says. Mallory lives in Cincinnati, the most bed bug-infested city in the coun-

Mary Winter is State Legislature’s assistant editor and senior writer.



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—REPRESENTATIVE DALE MALLORY (D), OHIO

try, according to Terminix pest control company, which ranks cities according to the number of service calls it receives from each.

Soon after Mallory was elected in 2007, a tour of senior housing shocked him. “It was nightmarish,” Mallory says. “There were bed bugs falling from the ceiling. It traumatized me. And the more I looked, the more I saw... It’s one of the smartest bugs. It hides and waits for you, then smells your breath, like someone just lit up the barbecue grill.”

Bed bugs, which have no natural predators, invade apartment buildings, movie theaters, dormitories, nursing homes, hotels, airports—anyplace there’s a high concentration of transient people. They hitchhike in luggage and clothing and can just as easily show up in a five-star hotel as a homeless shelter. Eradicating an infestation “usually requires multiple visits by a licensed pest control operator and diligence on the part of those experiencing the infestation,” according to the CDC and EPA. The price can



Representative
Dale Mallory (D)
Ohio



Bed Bug Busters

Bed bugs are reddish-brown and can be as big as apple seeds. Notify your landlord or a pest control company as soon as you find bed bugs in your home. You could make the problem worse if you try to destroy them yourself, by spreading the bugs to other rooms in your home.

- ◆ Use a flashlight to check for small, reddish spots, they could be bed bugs hiding under and along the seams of the mattress, box spring and bed frame.
- ◆ Search other furniture near the bed, like night stands and chairs.
- ◆ When you sleep in a hotel, keep your luggage away from the wall, on a luggage rack or in a dry bathtub. Don't put it on the bed.
- ◆ Check for bugs wherever you are stay.
- ◆ If you see signs of bed bugs, call the hotel desk or tell your host right away.
- ◆ When you return home from a trip, keep your travel clothes separate from other laundry, and wash them in warm water right away.
- ◆ Vacuum to rid your luggage of bed bugs and empty the vacuum contents into a tightly sealed plastic bag. Throw the bag away in an outside garbage bin.

Source: U.S. Department of Health and Human Services.

be well over \$1,000, and people who can't afford that often try ineffective over-the-counter insect foggers or "bug bombs," or they try to drive the bugs out with intense heat, which can be dangerous without proper equipment, says Mallory.

What's needed, Mallory says, is research on more effective ways to kill bed bugs and legislation that allows more resources to be used to eradicate them. Mallory sponsored a successful House resolution asking Congress to urge the EPA to approve the emergency use of the pesticide Propoxur—banned for indoor use—to attack the bugs, but the bill died in Congress. He also formed a bed bug task force but claims local leaders are too embarrassed by a bed bug problem to deal with it. "Lots of people have decided to stick their heads in the sand." The lack of progress frustrates Mallory. "If you're Cincinnati, how do you continue to do nothing when you're No. 1 in the nation for bed bugs?"

Bug Laws

Ohio's anti-bed bug law prohibits hotels from using bedding infested with bed bugs or other vermin. At least 22 similar laws are on the books in other states. In New York, landlords must tell any prospective renters if an apartment has had bed bugs within the last year. Nevada requires infested hotel rooms be "thoroughly fumigated, disinfected and renovated until such vermin

or bed bugs or other similar things are entirely exterminated."

Oregon lawmakers took a different approach. State law shields the names of infested hotels and businesses. No government agency tracks bed bugs in Oregon, so private exterminators have been the best source of information, says Oregon Representative Bill Kennemer (R). Hotels fear they'll lose business if word gets out they have bed bugs. So lawmakers came up with "a workable and quality solution." Exterminators turn over infestation information to health agencies, but all names and exact locations are redacted from the public record. With tourism Oregon's third-biggest industry, keeping the lodging sector healthy is critical to the economy, Kennemer emphasizes.



*Representative
Bill Kennemer (R)
Oregon*

West Nile Outbreaks

In late July, Colorado Statehouse regulars were surprised to learn that a former colleague was hospitalized in critical condition, suffering severe headaches, weakness and fever—all because of a mosquito bite. Former Representative Ken Summers (R) developed encephalitis, or swelling of the brain, from a mosquito carrying the West Nile virus, which required him to be

on a ventilator to help him breathe. Doctors expect he will need months of therapy.

Summers' case was far worse than most. Up to 80 percent of people bitten by mosquitos carrying the virus don't develop any symptoms. The rest will suffer milder, flu-like symptoms. According to the CDC, most people with this type of West Nile disease recover completely, although fatigue can last weeks or months. A small percentage who are infected will develop what Summers has—serious neurologic illness, such as encephalitis or meningitis, which can cause coma, paralysis and death.

Since 1999, more than 37,000 Americans have contracted West Nile, and about 1,549 have died from it. Last year was especially bad—West Nile struck some 5,674 Americans, killing 286.

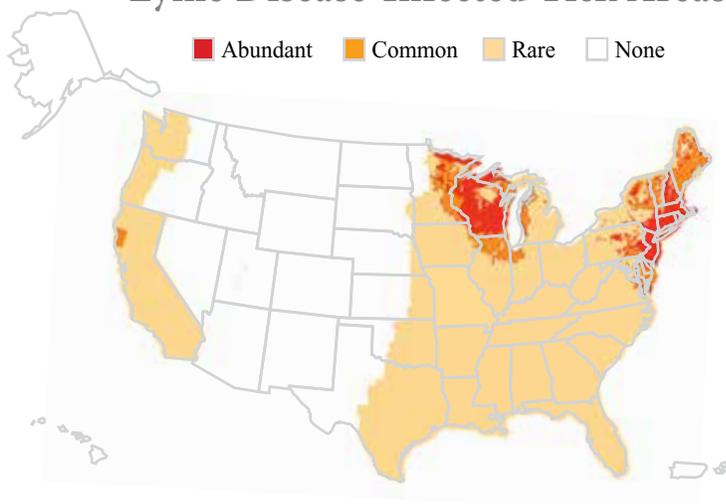
Outbreaks are hard to predict, although the right combination of weather, including high moisture and temperature, is known to encourage mosquito breeding. The good news is that pesticide spraying reduces the spread of the disease. "Numerous studies have shown that the risk of West Nile far outweighs the risk of pesticide exposure," says Janet McAllister, entomologist in CDC's Arboviral Diseases Branch. Still, safety concerns persist and environmental groups that object to pesticide spraying have taken up their concerns with lawmakers.

More typical is Maine's law, which directs state agriculture and forestry departments to protect the public from mosquito-borne diseases by using "integrated pest management techniques and other science-based technology that minimize the risk of pesticide use to humans and the environment."

Lyme on the Rise

Another vermin is causing an uptick in Lyme disease. The blacklegged or deer tick infects 300,000 Americans with the disease every year, the CDC estimates, and that number is increasing.

Lyme Disease-Infected Tick Areas



Source: American Lyme Disease Foundation



When ticks feed on people, they can infect them with a bacteria acquired from deer that causes Lyme disease. Up to 30 percent of deer—the ticks' main food source—carry the bacteria in their blood.

These ticks can be as small as pinheads, with bites that are painless, so people often don't detect them. But three to 30 days after being bitten, victims often develop flu-like symptoms and a skin rash. Most recover quickly if they receive antibiotics within 72 hours. Without the drugs, the infection can spread to the heart, joints and nervous system, causing long-term pain, cognitive impairment and numbness. Even when victims receive antibiotics, however, an unknown percentage continue to suffer symptoms.

In 2011, 96 percent of all cases of Lyme disease occurred in 13 states in the Northeast and Midwest. C. Ben Beard, chief of the Bacterial Diseases Branch, Division of Vector-Borne Diseases for the CDC, believes the increase in Lyme disease is due to "a number of factors," including changes in weather, loss of biodiversity due to land development and expanding deer populations.

In Massachusetts, where Lyme disease has been called an epidemic, a 2011 legislative report urged the state to look at more aggressive ways to fight the tick, including reducing deer and rodent populations, eliminating tick habitat, using chemical and biological controls, and increasing public awareness about checking routinely for ticks and wearing the proper clothing outdoors.

Representative Pam Brown (D) of New Hampshire calls Lyme disease a "huge problem" in her state and has first-hand knowledge of its devastation. Brown was bitten by a tick in 2002 and says she has never recovered. At 57, the one-time quality assurance engineer for a software firm has lost two jobs because of cognitive decline and fatigue. "My ability to work at that level is kaput. Instead of earning six figures, I have been on disability for years."



Brown takes Western and Chinese medicine, but says she still has difficulty concentrating and can't rely on her memory. "It takes me three hours to do a job that should take one." She says it took six years to get a diagnosis of Lyme

Representative Pam Brown (D) New Hampshire



disease—she was first told she had mononucleosis—and says many doctors don't believe chronic or long-term Lyme disease exists. In part to advocate for more awareness about Lyme disease, Brown ran for a House seat in a special election earlier this year and won. She would like to see legislation requiring New Hampshire doctors to receive Lyme disease education.

Because diagnosis remains inexact, Virginia this year passed a law requiring health care providers to notify affected patients that laboratory testing can produce false negatives. Other bills address treatment. A new Maine law mandates that the state's Lyme disease website include information about all kinds of treatments for Lyme, including long-term use of antibiotics. Many doctors opposed the bill, saying long-term antibiotic use may be riskier than the disease.

But in Connecticut, Massachusetts, New Hampshire and Rhode Island, doctors who treat Lyme patients with long-term antibiotics are protected from disciplinary action. In Connecticut and Rhode Island, insurance companies must cover treatment, and New York is considering similar legislation.

States and nonprofit groups are also stepping up efforts to educate people on how to avoid tick bites in the first place, which many experts agree is the single best defense against the disease.

Keeping the public safe has long been one of state governments' most important roles—a role most legislators will tell you never gets any easier. 

SL ONLINE

For more information on how to deal with disease carrying bugs, go to www.ncsl.org/magazine.